

## ABSTRACT

It is intended to provide a method of forming pancreatic  $\beta$  cells from mesenchymal cells characterized by comprising using  
5 mammal-origin mesenchymal cells as starting cells, culturing these cells in the presence of, for example, a pancreatic  $\beta$  cell-forming agent, and selecting and separating the thus obtained pancreatic  $\beta$  cells with the use of a gene expressed specifically in such cells as a selection marker; a remedy for glucose intolerance which  
10 comprises pancreatic  $\beta$  cells obtained by the above method as the active ingredient; a pancreatic  $\beta$  cell-forming agent such as a cytokine to be used in the above method; a method of screening a candidate compound promoting the formation of pancreatic  $\beta$  cells from mesenchymal cells; and a pancreatic  $\beta$  cell formation promoter  
15 obtained by this screening method.